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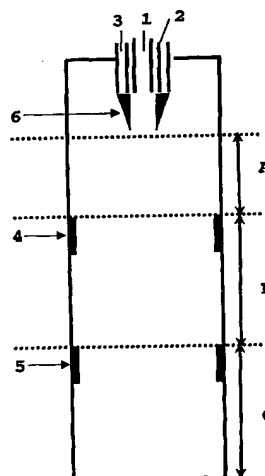
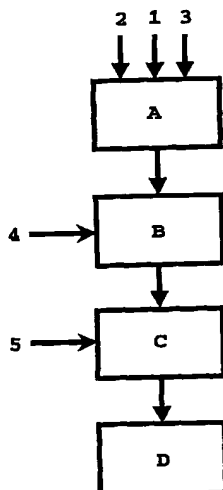
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(54) Title: ZINC OXIDE POWDER AGGREGATES PRESENT IN CIRCULAR, ELLIPSOIDAL, LINEAR AND BRANCHED
FORM



(57) Abstract: Pyrogenically prepared zinc oxide powder having a BET surface area of from 10 to 200 m²/g, which is in the form of aggregates, the aggregates being composed of particles having different morphologies, and 0-10 % of the aggregates being in a circular form, 30-50 % being in an ellipsoidal form, 30-50 % being in a linear form and 20-30 % being in a branched form. It is prepared by reacting a starting mixture containing zinc vapour, a combustible gas and steam or a mixture of steam and carbon dioxide in a flame with an oxygen-containing gas in an oxidation zone, cooling the hot reaction mixture in a quenching zone and separating the solid material from the gas stream, the amount of oxygen in the oxidation zone being greater than the amount necessary for the complete oxidation of the combustible gas and the zinc vapour. The zinc oxide powder can be used as a constituent of sun protection compositions for protection against UV radiation.



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